

8.0 GLOSSARY OF TERMS AND ACRONYMS

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| A-weighted decibel (dBA) | Sound measurements made on the A scale. |
| AAL | Acceptable ambient level. |
| AAQS | Ambient Air Quality Standards. |
| ac | Alternating current. |
| Acre-foot | The volume of water that will cover an area of one acre to a depth of one foot. |
| ADT | Average daily traffic. |
| Alluvial deposits | Material such as sand or silt, deposited on land by streams. |
| Alluvium | Unconsolidated deposits of transported particles. |
| Ambient | Air surrounding a particular spot, such as a power plant. Ambient air, for example, is the existing air quality; ambient noise is the existing noise level of the area. |
| aMW | Average megawatt. |
| Anadromous fish | Fish, such as salmon or steelhead trout, that hatch in freshwater, migrate to and mature in the ocean, and return to freshwater as adults to spawn. |
| Anticline | A fold in stratified rock units that is concave downward |
| Anticlinal | Landforms originally created by anticline structures |
| Aquifer | A geologic formation or structure that contains and transmits water in sufficient quantity to supply the needs for water development. Aquifers are usually saturated sands, gravel, or fractured rock. |
| Artesian | Water that is naturally under pressure and flows from the ground. |
| ASC | Application for Site Certificate. |
| Attainment area | A geographic area where the concentration of specific air pollutants does not exceed Federal standards. |

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| Average megawatt (aMW) | The number of megawatts that could be produced by a power plant, multiplied by the percent of time the power plant would normally be in operation over a specific period of time, usually 1 year. |
| BACT | Best Available Control Technology. |
| Basalts | Lava flows. |
| Best Available Control Technology (BACT) | An emission limitation based on the maximum degree of reduction of each pollutant subject to regulation and emitted from, or which results from, any major emitting facility. |
| BLM | Bureau of Land Management. |
| BPA | Bonneville Power Administration. |
| British Thermal Unit (Btu) | A quantity of heat required to raise the temperature of 0.45 Kg (1 pound) of water one degree Fahrenheit. |
| C | Celsius. |
| C1 | Commercial neighborhood. |
| CEMS | Continuous Emission Monitoring System. |
| Centimeter (cm) | A unit of measurement (in the metric system) equivalent to 0.3937 inches. |
| CFC | Chlorofluorocarbon. |
| CFR | Code of Federal Regulations. |
| cfs | Cubic feet per second. |
| Circuit breakers | A switching device that is capable of closing or interrupting an electrical circuit under over-load or short-circuit conditions as well as under normal load conditions. |
| Class I Area | Area designated for the most stringent degree of protection from future degradation of air quality. |
| Class II Area | Any area cleaner than the Federal air quality standard designated for a moderate degree of protection from future air quality degradation. Moderate increases in new pollution may be permitted in a Class II Area. |

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| Clastic dikes | Planar to subplanar structures composed of fine-grained sedimentary particles which cut across sedimentary rock layers. |
| CNG | Cascade Natural Gas. |
| CO | The chemical formula for carbon monoxide. Carbon monoxide is a colorless, odorless, and poisonous gas formed by incomplete combustion of carbon or a carbonaceous material, such as gasoline or natural gas. |
| CO₂ | The chemical formula for carbon dioxide. Carbon dioxide is a colorless, odorless, incombustible gas formed during respiration, combustion, and organic decomposition and commonly used in food refrigeration, carbonated beverages, inert atmospheres, fire extinguishers, and other aerosols. |
| Cogeneration | The technology of producing electrical energy together with useful thermal or mechanical energy for industrial or commercial purposes, using waste heat from one process to fuel the other. |
| Combined-cycle | The use of waste heat from a gas turbine topping cycle for the generation of electricity in a steam turbine generator system, thereby increasing the efficiency of heat use. |
| Combustion turbine | An integral part of cogeneration facilities operating on fuels that are capable of converting heat energy into electrical energy. |
| Containment dike | A berm designed to contain a potential release. |
| Cooling tower drift | Dissolved solids in cooling tower emissions that are deposited on soils and vegetation. |
| Corps | United States Army Corps of Engineers. |
| CRBG | Columbia River Basalt Group. |
| Criteria pollutant | An air pollution substance for which the Environmental Protection Agency has established environmental significance thresholds. If emissions will exceed threshold criteria, added requirements such as pollution offsets are imposed. |
| CTUIR | Confederated Tribes of the Umatilla Indian Reservation. |

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| Cubic feet per second (cfs) | A unit of measurement pertaining to flow or discharge of water. One cfs is equal to 449 gallons per minute. |
| Cultural resources | The nonrenewable evidence of human occupation or activity as seen in any district, site, building, structure, artifact, ruin, object, work of art, architecture, or natural feature that was important in human history at the national, state, or local level. |
| Cumulative impact | The impact on the environment that results from an action when added to other past, present, and reasonable foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time. |
| dB | Decibel. |
| dBA | A-weighted decibel. |
| Decibel (dB) | A decibel is a unit for expressing relative difference in power, usually between acoustic signals, equal to 10 times the common logarithm of the ratio of two levels. |
| EFSC | Energy Facility Siting Council. |
| EFU Zoning | Exclusive farm use. |
| EIS | Environmental Impact Statement. |
| Electric and magnetic fields (EMF) | The two types of fields of force that are produced by electricity, i.e., those that are produced by voltage (electric fields) and those that are produced by current (magnetic fields). Electric fields are produced by the force that causes current to flow through a conductor (voltage) and are measured by kilovolts per meter (kV/m). Magnetic fields are produced by the force that causes electrons to move in a conductor (current) and are measured in milligauss (mG). |
| Electric field | An energy field produced by voltage, measured in kilovolts per meter. |
| Emergent | As used in this document, a plant that is rooted and has parts extending above a water surface. |
| EMF | Electric and magnetic fields. |

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| Emissions | Substances discharged into the environment as waste material, such as discharge into the air from cooling towers or discharges into the water from waste streams. |
| Endangered species | A plant or animal that is in danger of extinction throughout all or a significant portion of its range, because its habitat is threatened with destruction, drastic modification, or severe curtailment or because of overexploitation, disease, predation, or other factors. Federally listed endangered species are officially designated by the U.S. Fish and Wildlife Service. |
| Energy | The ability to produce electrical power over a period of time, expressed in kilowatt hours. |
| Environmental Impact Statement (EIS) | A document defined at 40 CFR 1508.11 and prepared in accordance with the requirements of section 102(c) of NEPA, the Council on Environmental Quality Regulations, and DOE NEPA Guidelines. |
| Eolian | Wind-deposited. |
| F | Fahrenheit. |
| F1 | Exclusive farm use, 7.7-hectare (19-acre) minimum. |
| F2 | General rural, 7.7-hectare (19-acre) minimum. |
| FAA | Federal Aviation Administration. |
| Fecal coliform bacteria | Tiny organisms associated with the intestines of warm-blooded animals and commonly used to indicate the presence of fecal material and the potential presence of organisms capable of causing human disease. |
| Feeder dikes | Linear openings from which lava flows erupt. |
| Filter cake | Solids that are removed from process water and made into nonhazardous filter calves that are disposed of in a landfill. |
| Flood basalts | Lava flows characterized by very low viscosity and wide aerial extent. |
| Fluvial | Deposited by water. |
| FP | Floodplain. |
| g | Acceleration of gravity. |

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| Geologic hazard | A geologic condition, either natural or artificial, that poses a potential danger to life and property, e.g., landslides. |
| Glacial outwash | Sediment deposits as a result of meltwater outflow from glaciers or ice sheets. |
| Global warming | The phenomenon of gradually increasing average temperatures in the earth's atmosphere due primarily to accumulation of carbon dioxide. Carbon dioxide comes from the burning of fossil fuels and removal of forests and vegetation that take carbon dioxide out of the air. |
| gpm | Gallons per minute. |
| Greenhouse gas | A gas that contributes to global warming. |
| Groundwater | The supply of fresh water under the earth's surface in an aquifer or in soil. |
| Habitat | The environment occupied by individuals of a particular species, population, or community. |
| Hazardous materials | Substances which, if released in an uncontrolled manner, can be harmful to the environment. |
| Hectare (ha) | An area equivalent to 10,000 square meters or 2.471 acres. |
| Hectare-meter (ha-m) | The volume of water that will cover an area of one hectare to a depth of one meter. |
| HGC | Hermiston Generating Company. |
| Holocene | Period of geologic time extending from about 10,000 years ago to the present. |
| Hydric (soil) | A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic (able to grow in saturated areas) vegetation. |
| Impact | Positive or negative environmental consequences of a proposed action. |
| Infiltration | Seepage of water into the ground. |

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| Jurisdictional wetland | Wetlands that are subject to Section 404 of the Clean Water Act and to the Swampbuster provision of the Flood Security Act. |
| kg/ha-mo | Kilogram per hectare-month. |
| Kilogram per hectare-month (kg/ha-mo) | A unit used to measure the amount of a substance deposited over a hectare in one month. |
| Kilometer (km) | One thousand meters. |
| Kilovolt (kV) | One thousand volts. |
| Kilowatt (kW) | An electrical unit of power equal to 1,000 watts. |
| Kilowatt hour (kWh) | A basic unit of electric energy equal to one kilowatt for the period of one hour. |
| km | Kilometer. |
| kV | Kilovolt. |
| kV/m | Kilovolt per meter. |
| kWh | Kilowatt hour. |
| L₅₀ | A symbol that represents the maximum permitted noise level a project may create 50 percent of the time in an hour. |
| LAER | Lowest achievable emission rate. |
| lb/ac-mo | Pounds per acre-month. |
| L_{eq} | A symbol that represents the logarithmically weighted average noise level. |
| LI | Light industrial. |
| Lineament | Structure or series of structures or features that have the same alignment. |
| Liquefaction | Liquid-like behavior of a solid material. |
| Liter (L) | A unit of volume equivalent to 0.2642 gallons. |
| L_{MAX} | A symbol that represents the maximum permitted noise level (measured in decibels). |

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| LOS | Level of service. |
| lpm | Liters per minute. |
| M2 | Heavy industrial. |
| m³ | Cubic meter. Equal to 1,000 liters or 263 gallons. |
| m³/s | Cubic meters per second. |
| Magnetic field | An energy field produced by the movement of electrons in a wire (current), measured in milligauss (mG). |
| MCE | Maximum credible earthquake. |
| MCL | Maximum Contaminant Level. |
| Megawatt hour (MWh) | A basic unit of electrical energy equal to one megawatt for the period of one hour. |
| Megawatt (MW) | One thousand kilowatts (kW) or one million watts (W). |
| Meter (m) | Unit of length equal to 3.28 feet. |
| mG | Milligauss. |
| MGD | Million gallons per day. |
| Milligauss | Unit of magnetic field equal to 0.001 of a gauss. |
| Mitigation | Actions to avoid, minimize, reduce, eliminate, or compensate for the impact of a proposed activity or management practice. |
| MLD | Million liters per day. |
| MMBtu/hr | Million British thermal units per hour. |
| msl | Mean sea level. |
| MWh | Megawatt-hour. |
| NAGPRA | Native American Graves Protection and Repatriation Act. |
| Natural gas | A mixture of hydrocarbon gases that occurs with petroleum deposits, chiefly methane, together with varying quantities of ethane, butane, propane, and other gases. In addition to its use as a fuel, it is commonly used in the manufacture of organic compounds. |

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| NEPA | National Environmental Policy Act. Major Federal legislation passed by Congress in 1969 that requires that environmental impacts of major Federal actions be identified in a detailed statement of environmental impact, along with reasonable alternatives to the proposed actions. Furthermore, environmental impacts must be made known to the public and to the decision-maker, prior to a decision being made on the project. |
| NO₂ | The chemical formula for nitrogen dioxide. Nitrogen dioxide is a mildly poisonous brown gas often found in exhaust fumes and smog. It is synthesized for use as a catalyst and oxidizing or nitrating agent. |
| Nonattainment | An area which does not meet air quality standards set by the Clean Air Act for specified localities and time periods. |
| NO_x | Oxides of nitrogen. |
| NPDES | National Pollutant Discharge Elimination System. Federal water quality program administered by the State agency responsible for water quality. |
| NR | Natural resource. |
| NSPS | New Source Performance Standards. |
| NSR | New Source Review. |
| O₃ | Ozone. |
| OAR | Oregon Administrative Rule. |
| ODA | Oregon Department of Agriculture. |
| ODEQ | Oregon Department of Environmental Quality. |
| ODEF | Oregon Department of Fish and Wildlife. |
| ODOE | Oregon Department of Energy. |
| ONMP | Oregon Natural Heritage Program. |
| OWL | Olympic-Wallowa Lineament. |
| Palustrine | General freshwater wetlands classification associated with partially saturated areas not part of a surface water system. |

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| Parent material | The unconsolidated material from which soil develops. |
| Particulate matter | Fine solid particles that remain individually dispersed in stack emissions. |
| Pb | Lead. |
| PCB | Polychlorinated biphenyl. |
| PCE | Passenger car equivalents. |
| Permeability (soil) | The quality of soil that enables water to move downward through the profile, measured as the number of centimeters (inches) per hour that water moves downward. |
| PF | Public facilities. |
| PGA | Peak ground acceleration. |
| PGT | Pacific Gas Transmission. |
| Physiographic province | A region of similar structure and climate that has a unified geomorphic (pertaining to surface form) history. |
| Pleistocene | Period of geologic time extending from about 1.8 million years ago to about 10,000 years ago. |
| PM₁₀ | Particulate matter less than 10 microns (μ) in diameter. |
| Pound per acre-month (lb/ac-mo) | A unit used to measure the amount of a substance deposited over an acre in one month. |
| ppm | Parts per million. |
| ppmvd | Parts per million by volume dry. |
| Profile (soil) | A vertical section of the soil extending through different layers (horizons). |
| PSD | Prevention of Significant Deterioration. |
| psi | Pounds per square inch. |
| Pyroclastic flows | Rock material formed by a volcanic explosion. |
| R-O/S | Recreation-open space. |

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| R1 | Residential single-family in City of Umatilla Comprehensive Plan. Agricultural residential, 1.6-hectare (4acre) minimum, in Umatilla County plan. |
| R2 | Residential multi-family. |
| REA | Rural Electrification Administration. |
| Record of Decision | A document prepared in accordance with the requirements of 40 CFR 1505.2 that provides a concise public record of the agency's decision on a proposed action for which an EIS was prepared and identifies alternatives considered before reaching the decision, the environmentally preferred alternative(s), factors balanced by the agency making the decision, and whether all practical means to avoid or minimize environmental harm have been adopted and, if not, why. |
| Right-of-way | An easement for a certain purpose over property owned by someone else, such as a strip of land used for a transmission line, roadway, or pipeline. |
| Runoff | Water from precipitation or irrigation that flows over the ground surface and returns to streams or other water bodies. It can collect pollutants from the air or land and carry them to the receiving waters. |
| RV | Recreational vehicle. |
| Scarify | To scrape or churn up soil. |
| SCR | Selective catalytic reduction. |
| Selective catalytic reduction (SCR) | An air pollution control technology that reduces NO _x to nitrogen and water when combined with a reducing agent, such as ammonia. |
| Sensitive receptors | Hospitals, residences, sensitive vegetation and wildlife, or any other receptor that may be particularly sensitive to certain adverse effects, such as from noise or air pollution. |
| Shear zones | Localized deformation areas characterized by crushed and/or smeared rock material. |
| SHPO | State Historic Preservation Officer. |

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| Shrink-swell | The potential of a soil to expand or contract due to the presence of water-absorbing clay minerals. |
| Shrub-steppe | A community of low drought-tolerant shrubs and bunch grasses. |
| Significant Emissions Rate | Annual rate of emissions for specific pollutant that identifies a "major" air pollution source in ODEQ regulations. |
| SIL | Significant impact level. |
| SO₂ | The chemical formula for sulfur dioxide. Sulfur dioxide can be found in either a gaseous or liquid state. It is commonly used in the manufacture of sulfuric acid. |
| SR | Suburban residential. |
| Stratovolcano | Type of volcano formed by explosive eruptions and characterized by extreme height and steep flanks. |
| Surface water | Any water, temporary or permanent, which is above the ground surface and observable with the unaided eye. |
| Syncline | A fold in stratified rock units that is concave upward. |
| Synclinal | Landforms originally created by syncline structures. |
| TDS | Total dissolved solids. |
| Tectonic basins | A basin formed by the movement of geologic plates. |
| Tectonic | Related to the interaction of geologic plates. |
| Threatened species | Those species officially designated by the U.S. Government as likely to become endangered within the foreseeable future throughout all or a significant portion of their range. |
| Total Suspended Particulates (TSP) | The total volume of small particles suspended in a water column, expressed in percent. |
| Transmission line | The structures, insulators, conductors, and other equipment used to transfer electrical power from one point to another. |
| Transpression | Stress Regime that combines both translational and compressional stress, producing faults that are referred to as oblique-slip faults. |
| TSP | Total suspended particulates. |

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| µg/m³ | Unit of measurement commonly used to measure pollutants in air, specifically the number of micrograms per cubic meter. |
| UCDO | Umatilla County Development Ordinance. |
| UECA | Umatilla Electric Cooperative Association. |
| UGB | Urban growth boundary. |
| USFWS | United States Fish and Wildlife Service. |
| Volt | The unit of voltage or potential difference. It is the electromotive force, which, if steadily applied to a circuit having a resistance of one ohm, will produce a current of one ampere. |
| VOR | Vehicle occupancy rate. |
| Wastewater | Water that carries wastes from buildings, institutions, and industrial establishments. |
| Water table | The upper limit of the soil or underlying rock material that is wholly saturated with water. |
| Watershed | The area drained by a single river system. |
| Watt | The electrical unit of power or rate of doing work. The rate of energy transfer equivalent to one ampere flowing under the pressure of one volt. |
| Wetlands | An area where the soil experiences anaerobic conditions because of the inundation of water during a portion of any given year. Indicators of a wetland include types of plants, solid characteristics, and hydrology of the area. |
| Wheeling | Use of transmission facilities of one utility system to transmit power to another utility system or between customer facilities within a single utility system. |
| Xerofluvents | Soils of the entisol order that are developed on water-laid deposits in a Mediterranean-type climate. |
| Xerollic durorthids | Soils having a duripan (dense, compact soil horizon) within 100 cm of the surface and found in a cool Mediterranean climate bordering on arid. |